## STIC Biotechnology Systems Branch

# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/587,090
Source:	IFWP
Date Processed by STIC:	08/03/2006

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

## Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 10/587,090	
ATTN: NEW RULES CASES	S: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWAR	.E
1Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."	
2Invalid Line Length	h The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5Variable Length	Sequence(s)contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7Skipped Sequences (OLD RULES)		
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence <210> sequence id number <400> sequence id number 000	<b>&gt;</b>
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
Invalid <213> Besponse	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown of is Artificial Sequence. (see item 11 below)	or
Use of <220>	Sequence(s)missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules	
12PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid	



**IFWP** 

```
PATENT APPLICATION:
                                                                TIME: 09:43:34
                                            US/10/587,090
                      Input Set : F:\PCT EP2005 000620 Sequence listing.txt
                      Output Set: N:\CRF4\08032006\J587090.raw
      3 <110 > APPLICANT: Sloning BioTechnology GmbH
      5 <120> TITLE OF INVENTION: De novo enzymatic production of nucleic acid molecules
      7 <130> FILE REFERENCE: S 10018 PCT
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/587,090
C--> 9 <141> CURRENT FILING DATE: 2006-07-21
                                                                       Dres Not Comply
                                       Corrected Disherie Needed

-) If (2137 Responses are Holificial

-) It warms. Pls Explain the Source

of genetic Material. See Hem#11
      9 <160> NUMBER OF SEQ ID NOS: 28
     11 <170> SOFTWARE: PatentIn version 3.1
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 11
     15 <212> TYPE: DNA
     16 <213 > ORGANISM: Artificial
     18 <220> FEATURE:
     19 <221> NAME/KEY: misc feature
     20 <222> LOCATION: (7)..(11)
     21 <223 > OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     24 <400> SEQUENCE: 1
W--> 25 cgtctcnnnn n
     28 <210> SEQ ID NO: 2
                                                                                        Shelt
     29 <211> LENGTH: 11
                                            Jame Error
     30 <212> TYPE: DNA
     31 <213 > ORGANISM: (Artificial
     33 <220> FEATURE:
     34 <221> NAME/KEY: misc feature
     35 <222> LOCATION: (7)..(11)
     36 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     39 <400> SEQUENCE: 2
W--> 40 ggtctcnnnn n
                                                                                  11
     43 <210> SEQ ID NO: 3
     44 <211> LENGTH: 12
     45 <212> TYPE: DNA
                                           Same Eeror
     46 <213> ORGANISM:\ Artificial
     48 <220> FEATURE:
     49 <221> NAME/KEY: misc feature
     50 <222> LOCATION: (7)..(12)
     51 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     54 <400> SEQUENCE: 3
W--> 55 gaagacnnnn nn
                                                                                  12
     58 <210> SEQ ID NO: 4
     59 <211> LENGTH: 14
                                            Same Error
     60 <212> TYPE: DNA
     61 <213> ORGANISM: (Artificial
```

RAW SEQUENCE LISTING

64 <221> NAME/KEY: misc\_feature

63 <220> FEATURE:

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```
Input Set : F:\PCT EP2005 000620 Sequence listing.txt
                     Output Set: N:\CRF4\08032006\J587090.raw
     65 <222> LOCATION: (7)..(14)
     66 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     69 <400> SEQUENCE: 4
W--> 70 acctgcnnnn nnnn
                                                           Same Eeror
     73 <210> SEQ ID NO: 5
     74 <211> LENGTH: 8
     75 <212> TYPE: DNA
     76 <213> ORGANISM Artificial
     78 <220> FEATURE:
     79 <221> NAME/KEY: misc feature
     80 <222> LOCATION: (7)..(8)
     81 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     84 <400> SEQUENCE: 5
W--> 85 gcagtgnn
                                                                                8
     88 <210> SEQ ID NO: 6
     89 <211> LENGTH: 8
     90 <212> TYPE: DNA
     91 <213> ORGANISM: Artificial
     93 <220> FEATURE:
     94 <221> NAME/KEY: misc feature
     95 <222> LOCATION: (7)..(8)
     96 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     99 <400> SEQUENCE: 6
W--> 100 gcaatgnn
     103 <210> SEQ ID NO: 7
     104 <211> LENGTH: 12
     105 <212> TYPE: DNA
     106 <213> ORGANISM: Artificial
     108 <220> FEATURE:
     109 <221> NAME/KEY: misc feature
     110 <222> LOCATION: (7)..(12)
     111 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     114 <400> SEQUENCE: 7
W--> 115 gtatccnnnn nn
                                                                                12
     118 <210> SEQ ID NO: 8
     119 <211> LENGTH: 11
     120 <212> TYPE: DNA
     121 <213> ORGANISM: (Artificial
     123 <220> FEATURE:
     124 <221> NAME/KEY: misc feature
     125 <222> LOCATION: (7)..(11)
     126 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     129 <400> SEQUENCE: 8
W--> 130 actgggnnnn n
                                                                                11
     133 <210> SEQ ID NO: 9
     134 <211> LENGTH: 17
     135 <212> TYPE: DNA
     136 <213> ORGANISM: (Artificial
     138 <220> FEATURE:
```

RAW SEQUENCE LISTING

TIME: 09:43:34

```
Input Set : F:\PCT EP2005 000620 Sequence listing.txt
                     Output Set: N:\CRF4\08032006\J587090.raw
     139 <221> NAME/KEY: misc_feature
     140 <222> LOCATION: (7)..(17)
     141 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     144 <400> SEQUENCE: 9
W--> 145 ggcggannnn nnnnnn
                                                                                17
                                                    Same renor
     148 <210> SEQ ID NO: 10
     149 <211> LENGTH: 16
     150 <212> TYPE: DNA
     151 <213> ORGANISM: Artificial
     153 <220> FEATURE:
     154 <221> NAME/KEY: misc feature
     155 <222> LOCATION: (7)..(16)
     156 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     159 <400> SEQUENCE: 10
W--> 160 gaggagnnnn nnnnnn
                                                                                16
     163 <210> SEQ ID NO: 11
     164 <211> LENGTH: 15
     165 <212> TYPE: DNA
     166 <213> ORGANISM: \Artificial
     168 <220> FEATURE:
     169 <221> NAME/KEY: misc feature
     170 <222> LOCATION: (8)..(15)
     171 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     174 <400> SEQUENCE: 11
W--> 175 cacctgcnnn nnnnn
                                                                                15
     178 <210> SEQ ID NO: 12
     179 <211> LENGTH: 17
     180 <212> TYPE: DNA
     181 <213> ORGANISM: Artificial
     183 <220> FEATURE:
     184 <221> NAME/KEY: misc feature
     185 <222> LOCATION: (7)..(17)
     186 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     189 <400> SEQUENCE: 12
W--> 190 cagetennnn nnnnnnn
                                                                                17
     193 <210> SEQ ID NO: 13
     194 <211> LENGTH: 11
     195 <212> TYPE: DNA
     196 <213> ORGANISM: Artificial
     198 <220> FEATURE:
     199 <221> NAME/KEY: misc feature
     200 <222> LOCATION: (8)..(11)
     201 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     204 <400> SEQUENCE: 13
W--> 205 gctcttcnnn n
                                                                                11
     208 <210> SEQ ID NO: 14
     209 <211> LENGTH: 10
     210 <212> TYPE: DNA
     211 <213> ORGANISM / Artificial
```

RAW SEQUENCE LISTING

TIME: 09:43:34

```
Input Set : F:\PCT EP2005 000620 Sequence listing.txt
                     Output Set: N:\CRF4\08032006\J587090.raw
     213 <220> FEATURE:
     214 <221> NAME/KEY: misc feature
     215 <222> LOCATION: (7)..(10)
     216 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     219 <400> SEQUENCE: 14
W--> 220 ctcttcnnnn
                                                                                 10
     223 <210> SEQ ID NO: 15
     224 <211> LENGTH: 11
     225 <212> TYPE: DNA
     226 <213> ORGANISM:\Artificial
     228 <220> FEATURE:
     229 <221> NAME/KEY: misc feature
     230 <222> LOCATION: (7)..(11)
     231 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     234 <400> SEQUENCE: 15
W--> 235 ggtctcnnnn n
                                                                                 11
     238 <210> SEQ ID NO: 16
     239 <211> LENGTH: 11
     240 <212> TYPE: DNA
     241 <213> ORGANISM: Artificial
     243 <220> FEATURE:
     244 <221> NAME/KEY: misc feature
     245 <222> LOCATION: (7)..(11)
     246 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     249 <400> SEQUENCE: 16
W--> 250 cgtctcnnnn n
                                                                                 11
     253 <210> SEQ ID NO: 17
     254 <211> LENGTH: 14
     255 <212> TYPE: DNA
     256 <213> ORGANISM: (Artificial
     258 <220> FEATURE:
     259 <221> NAME/KEY: misc feature
     260 <222> LOCATION: (7)..(14)
     261 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     264 <400> SEQUENCE: 17
W--> 265 acctgcnnnn nnnn
                                                                                 14
     268 <210> SEQ ID NO: 18
     269 <211> LENGTH: 12
     270 <212> TYPE: DNA
     271 <213> ORGANISM: (Artificial
     273 <220> FEATURE:
     274 <221> NAME/KEY: misc feature
     275 <222> LOCATION: (7)..(12)
     276 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     279 <400> SEQUENCE: 18
W--> 280 gaagacnnnn nn
                                                                                 12
     283 <210> SEQ ID NO: 19
     284 <211> LENGTH: 8
     285 <212> TYPE: DNA
```

RAW SEQUENCE LISTING

TIME: 09:43:34

```
Input Set : F:\PCT_EP2005_000620_Sequence listing.txt
                     Output Set: N:\CRF4\08032006\J587090.raw
                                             Same Eerd
     286 <213> ORGANISM: Artificial
     288 <220> FEATURE:
     289 <221> NAME/KEY: misc feature
     290 <222> LOCATION: (7)..(8)
     291 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     294 <400> SEQUENCE: 19
W--> 295 gcaatgnn
                                                                                 8
     298 <210> SEQ ID NO: 20
     299 <211> LENGTH: 8
     300 <212> TYPE: DNA
     301 <213> ORGANISM: Artificial
     303 <220> FEATURE:
     304 <221> NAME/KEY: misc feature
     305 <222> LOCATION: (7)..(8)
     306 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     309 <400> SEQUENCE: 20
W--> 310 gcagtgnn
                                                                                 8
     313 <210> SEQ ID NO: 21
     314 <211> LENGTH: 11
     315 <212> TYPE: DNA
                        Artificial
     316 <213> ORGANISM
     318 <220> FEATURE:
     319 <221> NAME/KEY: misc feature
     320 <222> LOCATION: (7)..(11)
     321 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     324 <400> SEQUENCE: 21
W--> 325 actgggnnnn n
                                                                                11
     328 <210> SEQ ID NO: 22
     329 <211> LENGTH: 12
     330 <212> TYPE: DNA
     331 <213> ORGANISM: Artificial
     333 <220> FEATURE:
     334 <221> NAME/KEY: misc feature
     335 <222> LOCATION: (7)..(12)
     336 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     339 <400> SEQUENCE: 22
W--> 340 gtatccnnnn nn
                                                                                12
     343 <210> SEQ ID NO: 23
     344 <211> LENGTH: 16
     345 <212> TYPE: DNA
     346 <213> ORGANISM: (Artificial
     348 <220> FEATURE:
     349 <221> NAME/KEY: misc feature
     350 <222> LOCATION: (7)..(16)
     351 <223> OTHER INFORMATION: n stands for any of the nucleotides A, G, C or T
     354 <400> SEQUENCE: 23
W--> 355 gaggagnnnn nnnnnn
                                                                              · 16
     358 <210> SEQ ID NO: 24
     359 <211> LENGTH: 17
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/03/2006
PATENT APPLICATION: US/10/587,090 TIME: 09:43:35

Input Set : F:\PCT EP2005\_000620\_Sequence listing.txt

Output Set: N:\CRF4\08032006\J587090.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:1; N Pos. 7,8,9,10,11
Seq#:2; N Pos. 7,8,9,10,11
Seq#:3; N Pos. 7,8,9,10,11,12
Seq#:4; N Pos. 7,8,9,10,11,12,13,14
Seq#:5; N Pos. 7,8
Seq#:6; N Pos. 7,8
Seq#:7; N Pos. 7,8,9,10,11,12
Seg#:8; N Pos. 7,8,9,10,11
Seq#:9; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:10; N Pos. 7,8,9,10,11,12,13,14,15,16
Seq#:11; N Pos. 8,9,10,11,12,13,14,15
Seq#:12; N Pos. 7,8,9,10,11,12,13,14,15,16,27
Seq#:13; N Pos. 8,9,10,11
Seg#:14; N Pos. 7,8,9,10
Seg#:15; N Pos. 7,8,9,10,11
Seq#:16; N Pos. 7,8,9,10,11
Seq#:17; N Pos. 7,8,9,10,11,12,13,14
Seq#:18; N Pos. 7,8,9,10,11,12
Seq#:19; N Pos. 7,8
Seq#:20; N Pos. 7,8
Seq#:21; N Pos. 7,8,9,10,11
Seq#:22; N Pos. 7,8,9,10,11,12
Seq#:23; N Pos. 7,8,9,10,11,12,13,14,15,16
Seq#:24; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:25; N Pos. 7,8,9,10,11,12,13,14,15,16,17
Seq#:26; N Pos. 8,9,10,11,12,13,14,15
```

#### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27 Seq#:28 **VERIFICATION SUMMARY**PATENT APPLICATION: **US/10/587,090**DATE: 08/03/2006

TIME: 09:43:35

Input Set : F:\PCT\_EP2005\_000620\_Sequence listing.txt

Output Set: N:\CRF4\08032006\J587090.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:25 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0 L:40 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0 L:55 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0 L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0 L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0 L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0 L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0 L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0 L:145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0 L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0 L:175 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0 L:190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0 L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0 L:220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0 L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0 L:250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0 L:265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0 L:280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0 L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0 L:310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0 L:325 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0 L:340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0 L:355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0 L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0 L:385 M:341 W: (46) "n" or "Xaa" used, for SEO ID#:25 after pos.:0

L:400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0